

Inspection and Acceptance

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E.1 Contract Clauses Incorporated By Reference (FAR 52.252-2) (Feb 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: <http://www.arnet.gov/far>.

<i>Clause Number</i>	<i>Date</i>	<i>Title</i>
52.246-2	Aug 1996	Inspection of Supplies—Fixed Price
52.246-4	Aug 1996	Inspection of Services—Fixed Price
52.246-16	Apr 1984	Responsibility for Supplies

E.2 Standard of Performance and Acceptance of System(s)

In addition to the tests specified below, Acceptance is contingent upon compliance with all requirements described in Section C including, but not limited to, those pertaining to Networking Requirements (C.5.4) and IT Security Requirements (C.5.5). Data connectivity to and from the OCCS Backup facility in Gaithersburg, MD will be tested as well (see Table II a. in Section C). Acceptance is also contingent upon the delivery and correct functioning of any features offered beyond the requirements described in Section C. Acceptance is contingent upon successful completion of system certification and accreditation.

E.2.1 General

As subsystems may be delivered at different times and potentially to different locations, all applicable tests will be applied to each component after delivery is complete. Appropriate acceptance tests will be applied to all upgrade and replacement hardware and software. All tests will be performed at the discretion of the Government. [Acceptance testing is applicable to all systems and subsystems delivered under this contract.](#) These tests may also be applied to replacement equipment, substituted equipment, modified equipment, and

equipment supplied as remediation of any contractual shortfall. If any software upgrades are unable to meet test criteria, then the contractor is required to continue support for the existing software complement until such time as the upgraded software can meet test criteria. All portions of the tests will be done during the same 30 consecutive day period within a 90 day window for each subsystem. Should the contractor fail to meet any of the tests, the contract may be terminated for default or the Government (at its discretion) may negotiate alternative remedies. Each subsystem will be accepted separately. Failure to meet a performance target may be remedied by providing additional or substitute hardware and software (any source code modifications to the benchmarks other than Class A must be approved by the Government). If additional or substitute hardware causes a facility impact, the contractor shall be required to remedy the facility impact.

The glossary in section C of this document will provide the definitions for terms used in this section.

E.2.2 Availability and Reliability

Each subsystem of the R & D HPCS shall be available at least 96% of the time. The minimum amount of time charged for a failed component within a subsystem will be four (4) hours. This will be tested during the acceptance test period with a job load supplied by the Government. This job load will include jobs submitted by both users and administrators of the system. Administrators may submit applications that have been shown to be problematic on previous systems. Some of these applications are available at <http://rdhpcs.noaa.gov/TestCodes>. All of the codes from the workstreams are expected to run on the subsystems for which they were bid.

The Government, at its discretion, may provide a series of carefully monitored workstreams that may include up to twenty-five (25) individual batch jobs. These workstreams will be monitored for end-to-end success. Complete or partial failure of any intermediate step will result in declaring the workstream to have failed. Success will be determined as the number of successful workstreams divided by the number of attempted workstreams in a 30 day period per subsystem. This ratio must be greater than 0.96 (96%) during the acceptance test period as well as during the life of the contract. Failures due to null time, application errors, or data errors will not be included in either the numerator or denominator of the above ratio.

E.2.3 Performance

E.2.3.1 Benchmark Performance

All of the workstreams associated with the subsystem must meet the performance criteria **proposed** by the contractor. The interactive benchmarks

associated with the workstreams will be run and tested by the Government. Failure to meet the performance criteria may not be remedied by performing any code modifications other than Class A to the benchmark codes unless these modifications have been approved by the Government. Other remedies include substitution of hardware that is approved by the Government or by providing additional hardware identical to that already provided.

The results of the benchmarks will be used to calculate the potential system life throughput (SLT) for the tested subsystem. [The workstream performance will be tested during the acceptance test period.](#) This must meet the SLT [proposed](#) for the subsystem. The performance results will be used throughout the contract period (or until the installed system is replaced or upgraded).

E.2.3.2 Disk I/O Performance

When possible, all performance specifications indicated in the contractor's proposal will be verified. Any failures to meet the specifications shall be remedied or result in failure of the acceptance test.

E.2.3.3 Hierarchical Storage Management System (HSMS) Performance

The HSMS benchmarks related to the workstreams associated with the subsystem will be run on the HSMS. The bandwidth to and from the HSMS shall be tested by the Government during the acceptance test period. The ability to correctly retrieve files will be tested as well. Any failures of these tests will result in failure of the acceptance test. The Government will attempt to store and retrieve enough data to involve all components of the HSMS associated with a subsystem.

E.2.4 Reproducibility

Codes that are known to provide bit reproducible results may be run at the Government's discretion. If the codes fail to produce the same results for repeated runs in an environment where bit reproducibility is expected on the same type of hardware/software within a subsystem, then the acceptance test is deemed to be failed until the contractor can provide a remedy. The Government [will attempt](#) to perform these tests for the first time within the first 20 days of the acceptance test period for a subsystem. [Should the first instance of the test not be performed within 20 days, the Government will extend the acceptance test period one day for each day of delay or forego the test entirely.](#)

E.2.5 Acceptance Test Spreadsheet

The COTR, or an appropriate designee, will construct and maintain during the acceptance tests (described in Section E.2) a spreadsheet that [shows](#) all metrics designated by the acceptance test criteria and record all events, and the

diagnosed causes, contributing to these [results](#). The COTR, selected NOAA staff (including affiliates and contract staff) involved in the acceptance testing, and Contractor representatives will meet routinely during the acceptance test period to agree on event categorizations and descriptions, and validate the acceptance test criteria metrics.

E.3 Acceptance Documentation and Date of Acceptance

At the successful conclusion of the Acceptance Test the following documents will be produced: (1) Letter of Acceptance and (2) Acceptance Test Report.

Letter of Acceptance

The Letter of Acceptance for each subsystem is authored by the Contractor, and signed by both the Contractor and the Contracting Officer, upon successful completion of the E.2 acceptance test period and retroactively establishing the first day of the successful 30-day performance period.

Acceptance Test Report

Co-authored by the Contractor and the COTR and completed within three working days of execution of the Letter of Acceptance, the acceptance test report documents the events of the evaluation period and provides both a subjective assessment of the subsystem and an objective tabulation of acceptance test period events and results. Objective information to be included in the report are: the final values for all acceptance criteria metrics, a copy of the acceptance test spreadsheet, and a description of all events (including null time periods), as well as causes for and remedies of those events.

Charges shall commence on the first day of the successful performance period. The Government shall not accept equipment and shall not pay charges until the standard of performance is met.

E.3.1 Optional Period of Performance Acceptance

One four year optional period of performance is included in the contract. Acceptance of upgrades associated with the option will correspond with requirements in E.1 and E.2. System performance metrics will be determined based on the benchmark suite defined in Section J. The Government and the contractor may mutually agree to change the performance benchmarks at the beginning of the option period, otherwise the existing workstreams will be used. [If the parties are unable to reach mutual agreement, the Government reserves the unilateral right to determine the HPCS workstream benchmarks to be used for acceptance testing and the Contractor agrees that it will comply subject to the Disputes clause.](#)

E.4 DELAY OF START OF PERFORMANCE PERIOD

If necessary, the Government may delay the start of the acceptance period, but such a delay shall not exceed 30 consecutive days. Should the Government delay the start of the acceptance period, rental or maintenance charges shall accrue for that period of time between the installation date and the start of the acceptance period and shall be paid upon completion of the successful acceptance period.